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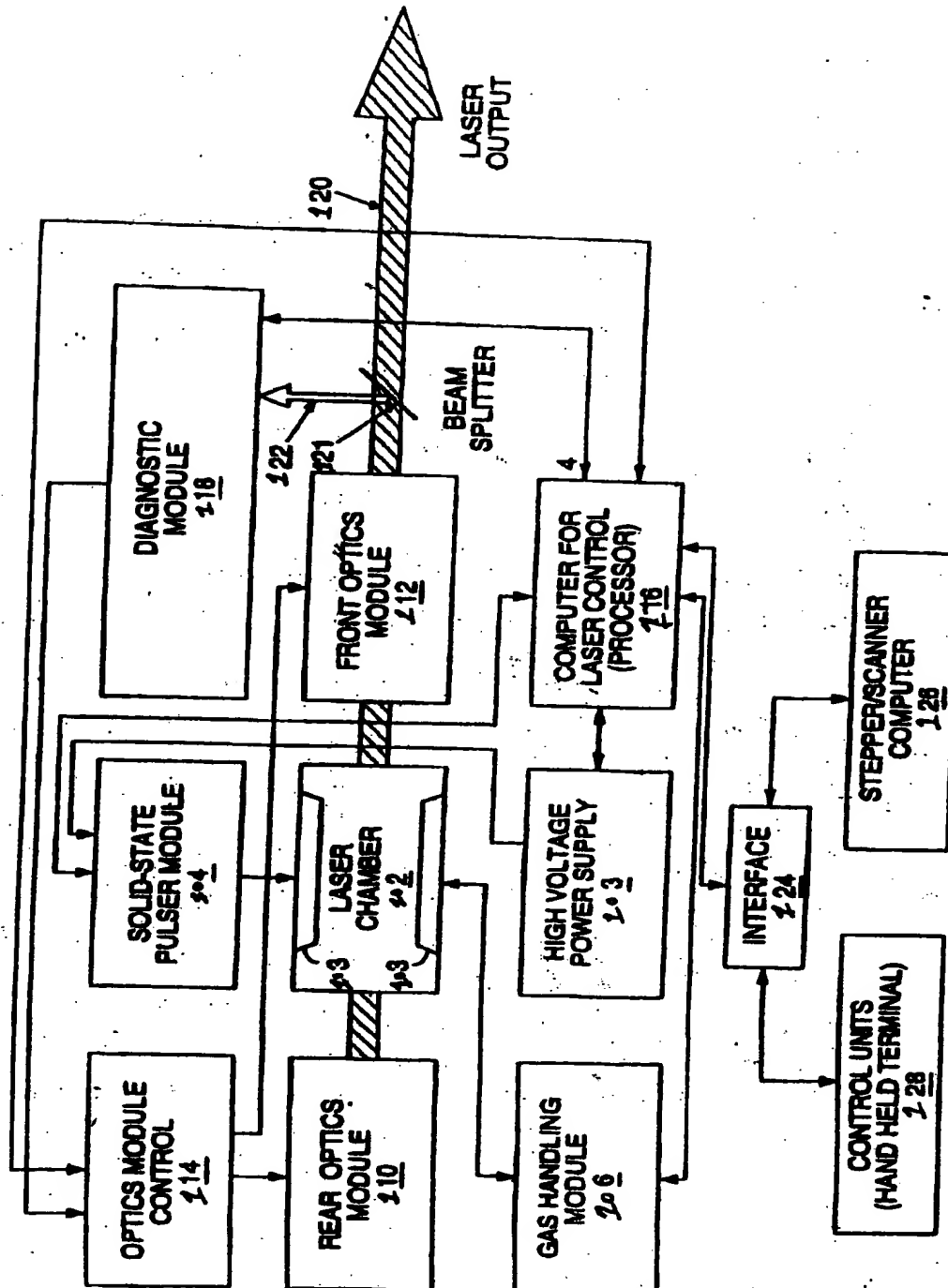
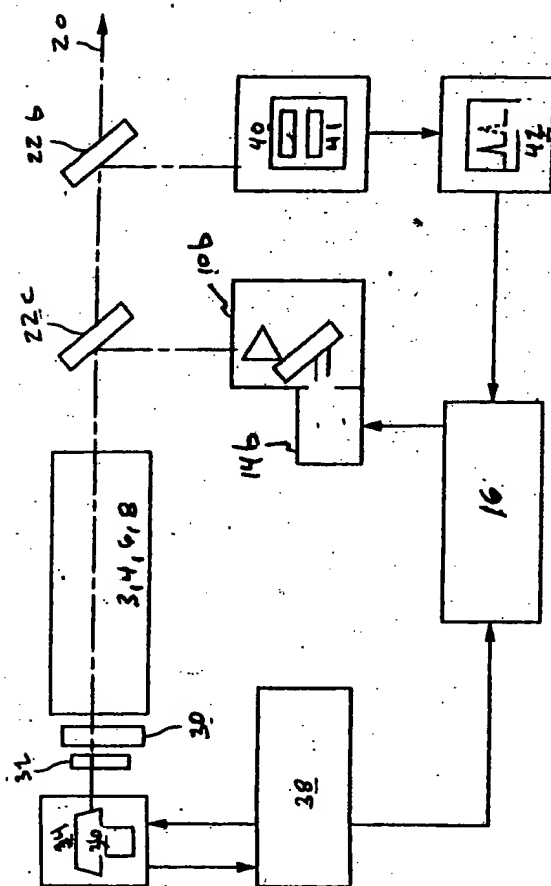


Figure 1



Scheme of the laser system including the apparatus and processing for absolute wavelength calibration

- 3, 4, 6, 8 laser chamber, resonator, power supply
- 34 wavelength calibration tool containing absorbing element
- 38 signal processing and driving source for laser cell
- 16 main processing and data recording
- 10b line narrowing and tuning block
- 14b motor drive for wavelength shift
- 40 wavelength monitoring
- 42 display for wavelength
- 22b, 22c beam splitters
- 31 resonator mirror
- 20 narrow-band output beam
- 30 polarizer
- 36 gaseous element

FIG. 7

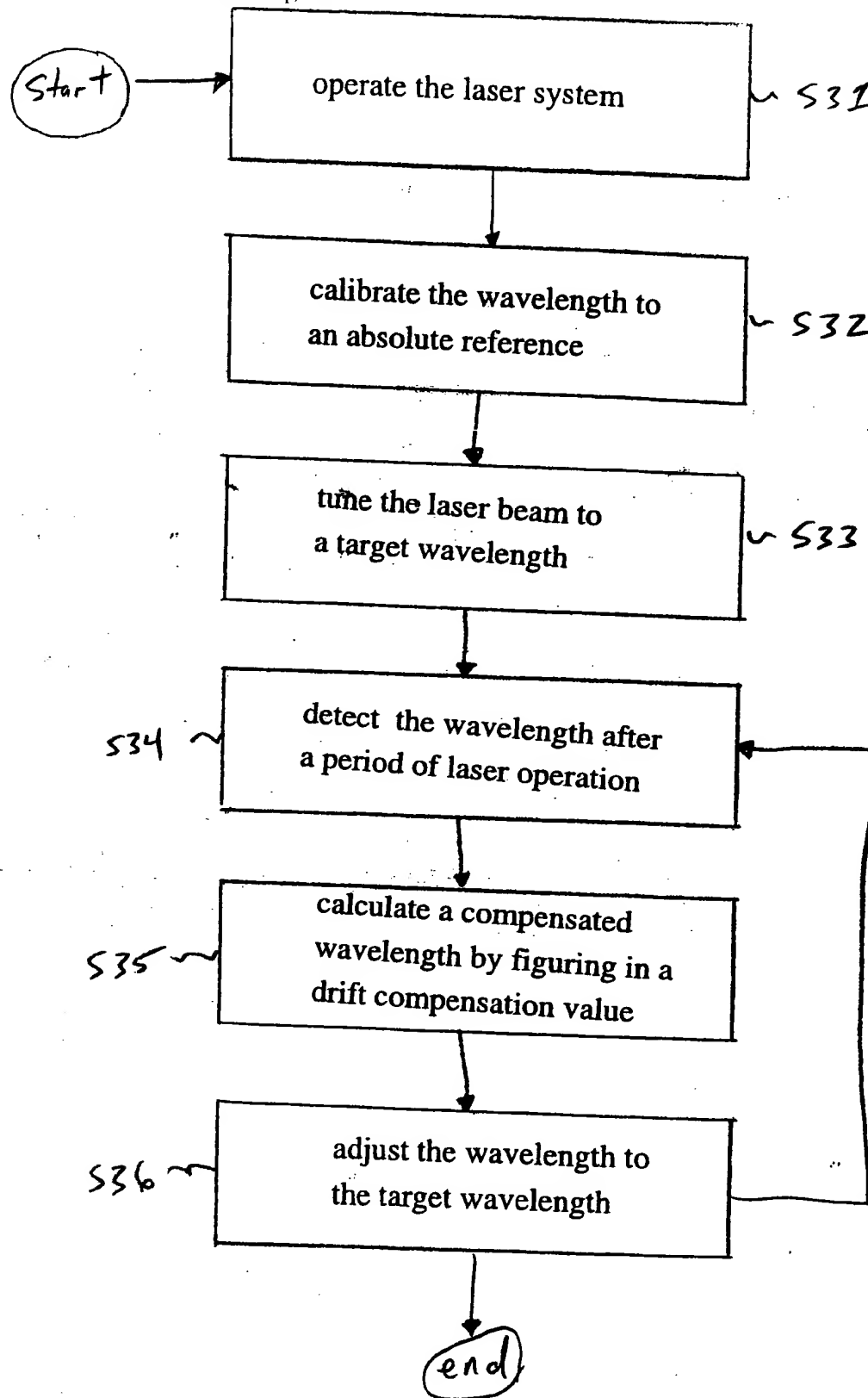


Figure 3

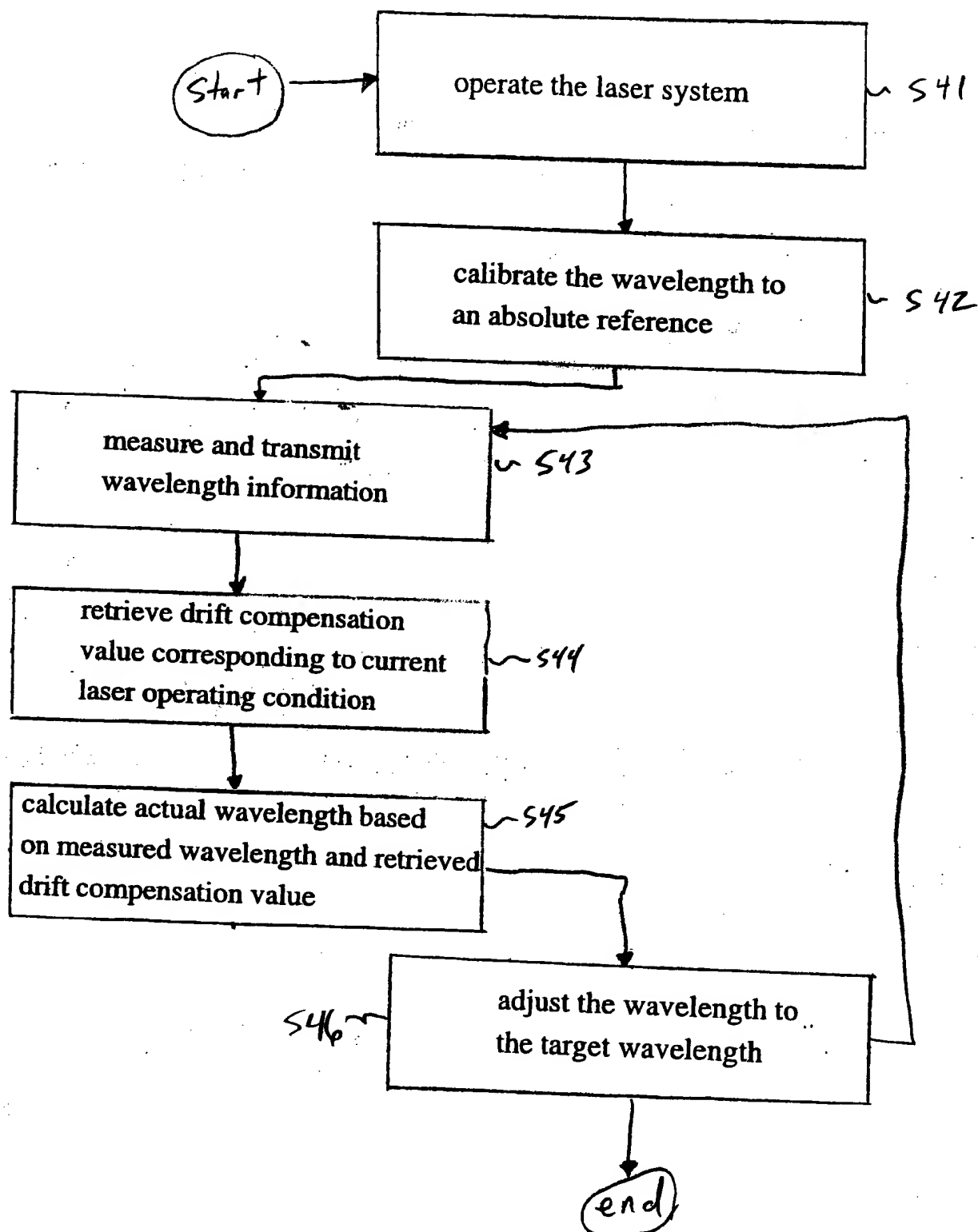


Figure 4

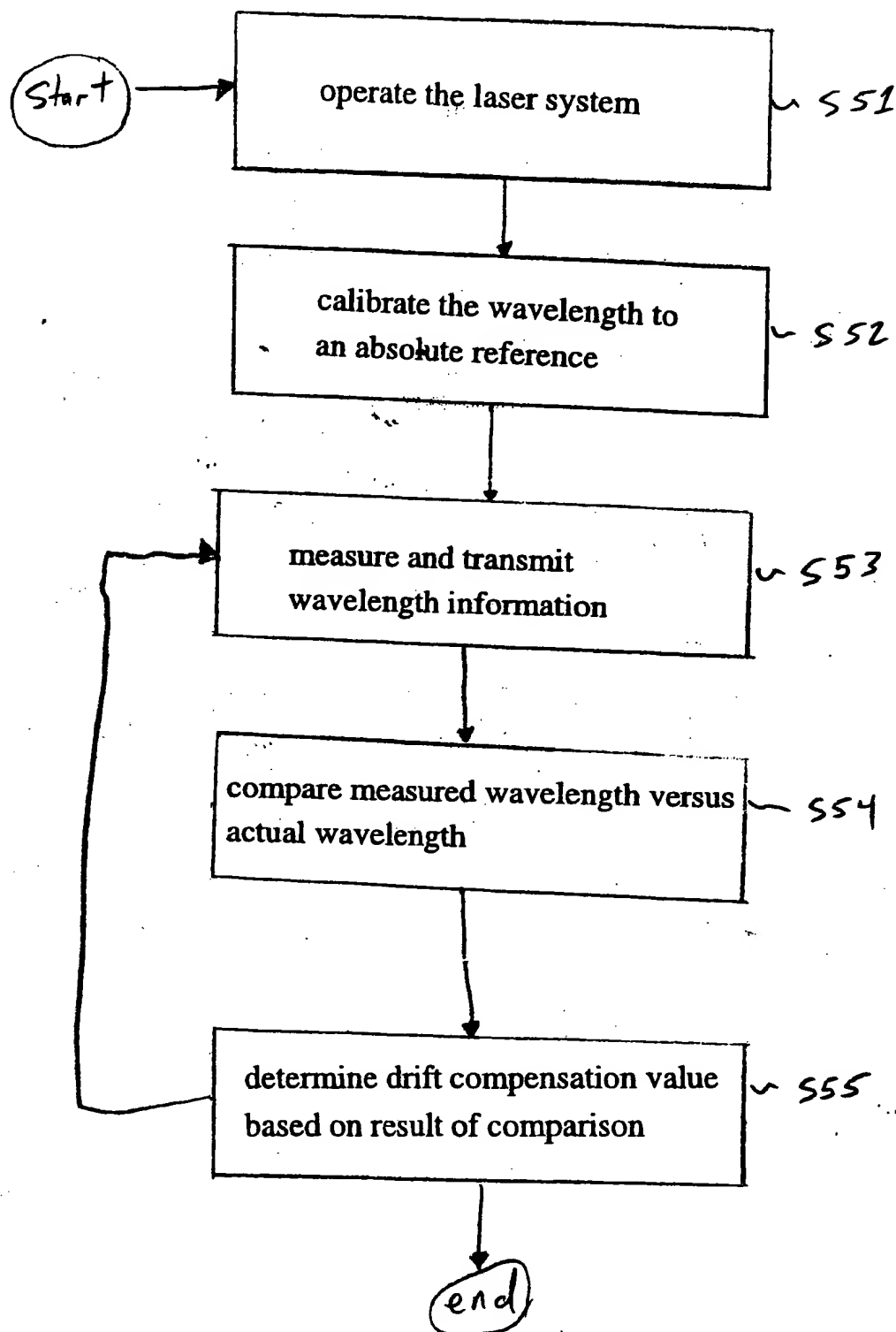


Figure 5

093045-07004

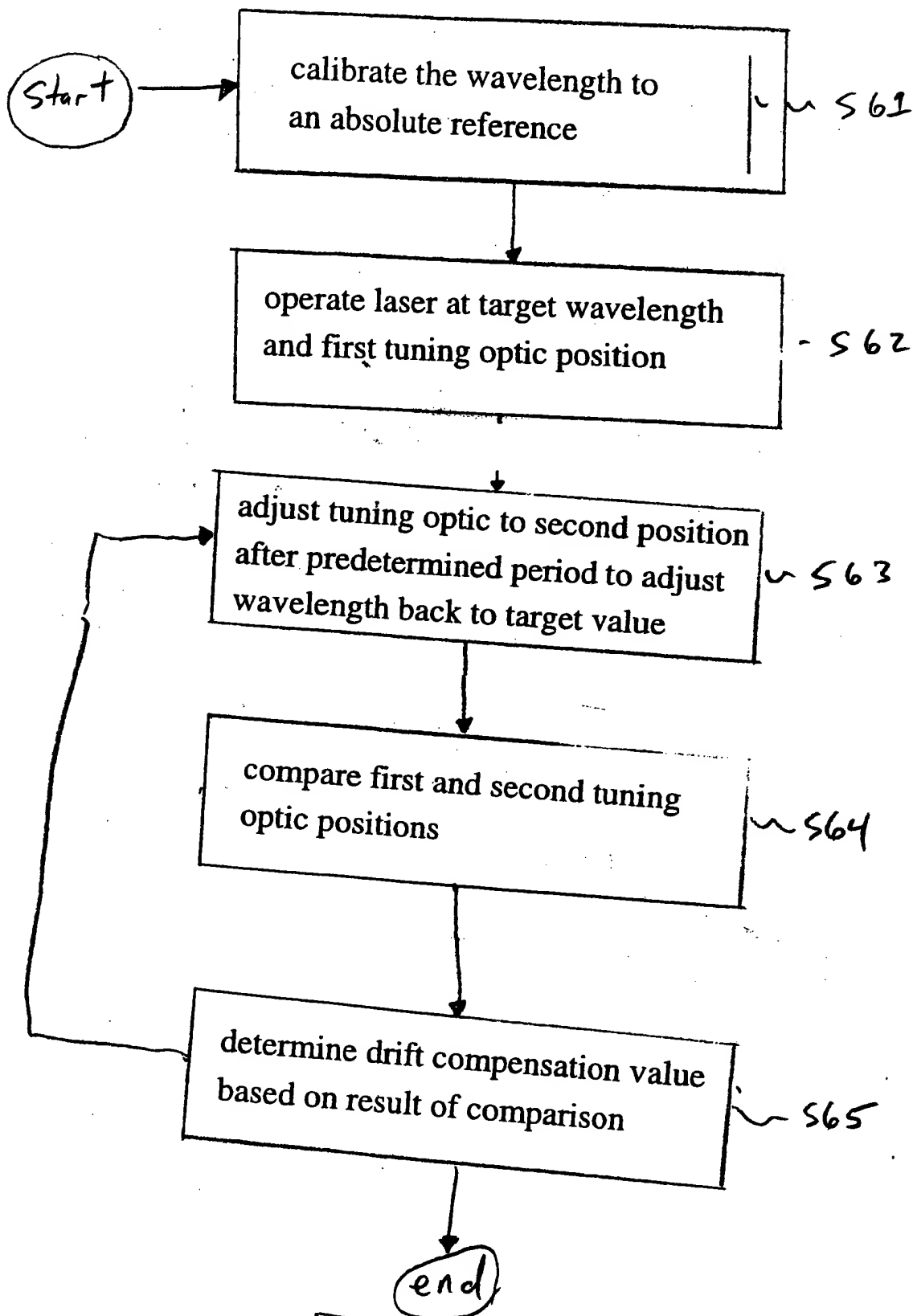


Figure 6

Wavelength (nm)	Intensity (a.u.)	Wavelength (nm)	Intensity (a.u.)	Wavelength (nm)	Intensity (a.u.)	Wavelength (nm)	Intensity (a.u.)
400	0.01	400	0.01	400	0.01	400	0.01
410	0.02	410	0.02	410	0.02	410	0.02
420	0.03	420	0.03	420	0.03	420	0.03
430	0	430	0.02	430	0.04	430	0
440	0.01	440	0	440	0.01	440	0.03
450	0.02	450	0.05	450	0.02	450	0.05
460	0.03	460	0.08	460	0.03	460	0.08
470	0.04	470	0.11	470	0.04	470	0.11
480	0.05	480	0.14	480	0.05	480	0.14
490	0.06	490	0.17	490	0.06	490	0.17
500	0.07	500	0.20	500	0.07	500	0.20
510	0.08	510	0.23	510	0.08	510	0.23
520	0.09	520	0.26	520	0.09	520	0.26
530	0.10	530	0.29	530	0.10	530	0.29
540	0.11	540	0.32	540	0.11	540	0.32
550	0.12	550	0.35	550	0.12	550	0.35
560	0.13	560	0.38	560	0.13	560	0.38
570	0.14	570	0.41	570	0.14	570	0.41
580	0.15	580	0.44	580	0.15	580	0.44
590	0.16	590	0.47	590	0.16	590	0.47
600	0.17	600	0.50	600	0.17	600	0.50
610	0.18	610	0.53	610	0.18	610	0.53
620	0.19	620	0.56	620	0.19	620	0.56
630	0.20	630	0.59	630	0.20	630	0.59
640	0.21	640	0.62	640	0.21	640	0.62
650	0.22	650	0.65	650	0.22	650	0.65
660	0.23	660	0.68	660	0.23	660	0.68
670	0.24	670	0.71	670	0.24	670	0.71
680	0.25	680	0.74	680	0.25	680	0.74
690	0.26	690	0.77	690	0.26	690	0.77
700	0.27	700	0.80	700	0.27	700	0.80
710	0.28	710	0.83	710	0.28	710	0.83
720	0.29	720	0.86	720	0.29	720	0.86
730	0.30	730	0.89	730	0.30	730	0.89
740	0.31	740	0.92	740	0.31	740	0.92
750	0.32	750	0.95	750	0.32	750	0.95
760	0.33	760	0.98	760	0.33	760	0.98
770	0.34	770	1.01	770	0.34	770	1.01
780	0.35	780	1.04	780	0.35	780	1.04
790	0.36	790	1.07	790	0.36	790	1.07
800	0.37	800	1.10	800	0.37	800	1.10
810	0.38	810	1.13	810	0.38	810	1.13
820	0.39	820	1.16	820	0.39	820	1.16
830	0.40	830	1.19	830	0.40	830	1.19
840	0.41	840	1.22	840	0.41	840	1.22
850	0.42	850	1.25	850	0.42	850	1.25
860	0.43	860	1.28	860	0.43	860	1.28
870	0.44	870	1.31	870	0.44	870	1.31
880	0.45	880	1.34	880	0.45	880	1.34
890	0.46	890	1.37	890	0.46	890	1.37
900	0.47	900	1.40	900	0.47	900	1.40
910	0.48	910	1.43	910	0.48	910	1.43
920	0.49	920	1.46	920	0.49	920	1.46
930	0.50	930	1.49	930	0.50	930	1.49
940	0.51	940	1.52	940	0.51	940	1.52
950	0.52	950	1.55	950	0.52	950	1.55
960	0.53	960	1.58	960	0.53	960	1.58
970	0.54	970	1.61	970	0.54	970	1.61
980	0.55	980	1.64	980	0.55	980	1.64
990	0.56	990	1.67	990	0.56	990	1.67
1000	0.57	1000	1.70	1000	0.57	1000	1.70
1010	0.58	1010	1.73	1010	0.58	1010	1.73
1020	0.59	1020	1.76	1020	0.59	1020	1.76
1030	0.60	1030	1.79	1030	0.60	1030	1.79
1040	0.61	1040	1.82	1040	0.61	1040	1.82
1050	0.62	1050	1.85	1050	0.62	1050	1.85
1060	0.63	1060	1.88	1060	0.63	1060	1.88
1070	0.64	1070	1.91	1070	0.64	1070	1.91
1080	0.65	1080	1.94	1080	0.65	1080	1.94
1090	0.66	1090	1.97	1090	0.66	1090	1.97
1100	0.67	1100	2.00	1100	0.67	1100	2.00
1110	0.68	1110	2.03	1110	0.68	1110	2.03
1120	0.69	1120	2.06	1120	0.69	1120	2.06
1130	0.70	1130	2.09	1130	0.70	1130	2.09
1140	0.71	1140	2.12	1140	0.71	1140	2.12
1150	0.72	1150	2.15	1150	0.72	1150	2.15
1160	0.73	1160	2.18	1160	0.73	1160	2.18
1170	0.74	1170	2.21	1170	0.74	1170	2.21
1180	0.75	1180	2.24	1180	0.75	1180	2.24
1190	0.76	1190	2.27	1190	0.76	1190	2.27
1200	0.77	1200	2.30	1200	0.77	1200	2.30
1210	0.78	1210	2.33	1210	0.78	1210	2.33
1220	0.79	1220	2.36	1220	0.79	1220	2.36
1230	0.80	1230	2.39	1230	0.80	1230	2.39
1240	0.81	1240	2.42	1240	0.81	1240	2.42
1250	0.82	1250	2.45	1250	0.82	1250	2.45
1260	0.83	1260	2.48	1260	0.83	1260	2.48
1270	0.84	1270	2.51	1270	0.84	1270	2.51
1280	0.85	1280	2.54	1280	0.85	1280	2.54
1290	0.86	1290	2.57	1290	0.86	1290	2.57
1300	0.87	1300	2.60	1300	0.87	1300	2.60
1310	0.88	1310	2.63	1310	0.88	1310	2.63
1320	0.89	1320	2.66	1320	0.89	1320	2.66
1330	0.90	1330	2.69	1330	0.90	1330	2.69
1340	0.91	1340	2.72	1340	0.91	1340	2.72
1350	0.92	1350	2.75	1350	0.92	1350	2.75
1360	0.93	1360	2.78	1360	0.93	1360	2.78
1370	0.94	1370	2.81	1370	0.94	1370	2.81
1380	0.95	1380	2.84	1380	0.95	1380	2.84
1390	0.96	1390	2.87	1390	0.96	1390	2.87
1400	0.97	1400	2.90	1400	0.97	1400	2.90
1410	0.98	1410	2.93	1410	0.98	1410	2.93
1420	0.99	1420	2.96	1420	0.99	1420	2.96
1430	1.00	1430	2.99	1430	1.00	1430	2.99
1440	1.01	1440	3.02	1440	1.01	1440	3.02
1450	1.02	1450	3.05	1450	1.02	1450	3.05
1460	1.03	1460	3.08	1460	1.03	1460	3.08
1470	1.04	1470	3.11	1470	1.04	1470	3.11
1480	1.05	1480	3.14	1480	1.05	1480	3.14
1490	1.06	1490	3.17	1490	1.06	1490	3.17
1500	1.07	1500	3.20	1500	1.07	1500	3.20
1510	1.08	1510	3.23	1510	1.08	1510	3.23
1520	1.09	1520	3.26	1520	1.09	1520	3.26
1530	1.10	1530	3.29	1530	1.10	1530	3.29
1540	1.11	1540	3.32	1540	1.11	1540	3.32
1550	1.12	1550	3.35	1550	1.12	1550	3.35
1560	1.13	1560	3.38	1560	1.13	1560	3.38
1570	1.14	1570	3.41	1570	1.14	1570	3.41
1580	1.15	1580	3.44	1580	1.15	1580	3.44
1590	1.16	1590	3.47	1590	1.16	1590	3.47
1600	1.17	1600	3.50	1600	1.17	1600	3.50
1610	1.18	1610	3.53	1610	1.18	1610	3.53
1620	1.19	1620	3.56	1620	1.19	1620	3.56
1630	1.20	1630	3.59	1630	1.20	1630	3.59
1640	1.21	1640	3.62	1640	1.21	1640	3.62
1650	1.22	1650	3.65	1650	1.22	1650	3.65
1660	1.23	1660	3.68	1660	1.23	1660	3.68
1670	1.24	1670	3.71	1670	1.24	1670	3.71
1680	1.25	1680	3.74	1680	1.25	1680	3.74
1690	1.26	1690	3.77	1690	1.26	1690	3.77
1700	1.27	1700	3.80	1700	1.27	1700	3.80
1710	1.28	1710	3.83	1710	1.28	1710	3.83
1720	1.29	1720	3.86	1720	1.29	1720	3.86
1730	1.30	1730	3.89	1730	1.30	1730	3.89
1740	1.31	1740	3.92	1740	1.31	1740	3.92
1750	1.32	1750	3.95	1750	1.32	1750	3.95
1760	1.33	1760	3.98	1760	1.33	1760	3.98
1770	1.34	1770	4.01	1770	1.34	1770	4.01
1780	1.35	1780	4.04	1780	1.35	1780	4.04
1790	1.36	1790	4.07	1790	1.36	1790	4.07
1800	1.37	1800	4.10	1800	1.37	1800	4.10
1810	1.38	1810	4.13	1810	1.38	1810	4.13
1820	1.39	1820	4.16	1820	1.39	1820	4.16
1830	1.40	1830	4.19	1830	1.40	1830	4.19
1840	1.41	1840	4.22	1840	1.41	1840	4.22
1850	1.42	1850	4.25	1850	1.42	1850	4.25
1860	1.43	1860	4.28	1860	1.43	1860	4.28
1870	1.44	1870	4.31	1870	1.44	1870	4.31
1880	1.45	1880	4.34	1880	1.45	1880	4.34
1890	1.46	1890	4.37	1890	1.46	1890	4.37
1900	1.47	1900	4.40	1900	1.47	1900	4.40
1910	1.48	1910	4.43	1910	1.48	1910	4.43
1920	1.49	1920	4.46	1920	1.49	1920	4.46
1930	1.50	1930	4.49	1930	1.50	1930	4.49
1940	1.51	1940	4.52	1940	1.51	1940	4.52
1950	1.52	1950	4.55	1950	1.52	1950	4.55
1960	1.53	1960	4.58	1960	1.53	1960	4.58
1970	1.54	1970	4.61	1970	1.54	1970	4.61
1980	1.55	1980	4.64	1980	1.55	1980	4.64
1990	1.56	1990	4.67	1990	1.56	1990	4.67
2000	1.57	2000	4.70	2000	1.57	2000	4.70
2010	1.58	2010	4.73	2010	1.58	2010	4.73
2020	1.59	2020	4.76	2020	1.59	2020	4.76
2030	1.60	2030	4.79	2030	1.60	2030	4.79
2040	1.61	2040	4.82	2040	1.61	2040	4.82
2050							

Figure 7